UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2
290 BROADWAY
NEW YORK, NY 10007-1866

DEC - 7 2012

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

Ms. Pilar Patterson, Chief
Bureau of Surface Water Permitting
New Jersey Department of Environmental Protection
P.O. Box 029
Trenton, NJ 08625

Dear Ms. Patterson:

This letter is intended to address permitting of wastewater discharges from Flue Gas Desulfurization (FGD) and Coal Combustion residual (CCR or ash) waste handling systems at steam electric power plants or from other similar CCR handling systems. The U.S. Environmental Protection Agency wishes to work with states to ensure that appropriate technology and water quality based effluent limits are included in the State-issued National Pollutant Discharge Elimination System (NPDES) permits for these facilities.

The EPA is working on an update of the Effluent Limitation Guidelines (ELG) for Steam Electric Power Plants (40 CFR §423). The preparation of that guideline has shown that waste streams from newer air pollution control equipment, specifically wet FGD or wet scrubbers, are a concentrated pollutant stream needing treatment and enforceable permits. In addition, failure of ash ponds in Tennessee and releases from ash ponds in Alabama has prompted the EPA to conduct physical assessment and monitoring at a number of sites. This closer examination of discharges from ash ponds containing CCR showed that they may have impacts on water quality. Given these concerns, "reasonable potential" to exceed Water Quality Standards must be assessed for these discharges and the permit must establish appropriate water quality-based limits where necessary.

NPDES permits must include effluent limits as required by the Clean Water Act (CWA) and implementing regulations. CWA §301(a)(1) requires that permits include limitations based on the application of statutorily prescribed levels of treatment (technology-based effluent limitations). Where the EPA has not promulgated technology-based effluent guidelines for a particular class or category of industrial discharger, or where the technology-based effluent guidelines do not address all waste streams or pollutants discharged by the industrial discharger, the permitting authority must establish technology-based effluent limitations on a case-by-case basis in individual NPDES permits, based on its best professional judgment or "BPJ."

On June 7, 2010, the EPA issued guidance entitled *National Pollutant Discharge Elimination System (NPDES) Permitting of Wastewater Discharges from Flue Gas Desulfurization and Coal Combustion Residuals Impoundments at Steam Electric Power Plants.* As described in Appendix A of that guidance, the applicable Steam Electric Power Generating effluent limitations guidelines and standards promulgated in 1982 did not consider the FGD wastestream. Thus, technology-based limitations established on a BPJ basis to address FGD wastewater at steam electric power plants are appropriate; therefore, to assist in the development of such limits, the guidance mentioned above provides state permitting authorities with information.

Additionally, the record for the 1982 ELG indicates that best available technology (BAT) was not established for fly ash or bottom ash transporter water in the final rule. The waters often combine with FGD wastewater and flow through, and eventually discharge, from CCR impoundments. Thus, BAT based limits would currently need to be established through a BPJ for CCR related discharges from sources such as FGD, CCR impoundments, or gasifier slag handing systems. Appropriate technology-based limits are needed for these discharges to comply with CWA §301(a)(1) and applicable Federal regulations at 40 CFR §125.3 (applicable to State NPDES permit programs per 40 CFR §125.25).

The NJDEP must consider the factors listed below when developing permits for power plants:

- Ensure that applications identify and facilities monitor waste streams from FGD, CCR, or gas slag handling sources;
- Require the newer sensitive methods for monitoring mercury, such as Methods 1631E and 245.7, in these waste streams;
- Refer to the current ELG to set limits for pollutants and wastestreams that were considered and regulated by the guideline, and use BPJ to set technology-based limits for pollutants and wastestreams that were not considered by the applicable ELG;
- Assess Reasonable Potential to exceed state water quality standards from FGD and CCR waste streams, and establish appropriate water quality-based limits where necessary.

The EPA committed to reviewing NPDES permits for FGD/CCR requirements in both 2011 and 2012 to comply with an Agency-wide legal settlement with the Environmental Integrity Project. Enclosed with this letter, please find comments on the Hudson Generating Station (NJ0000647), the Mercer Generating Station (NJ0004995), and the Deepwater Energy Center (NJ0005363). We understand these facilities are not currently in the renewal or modification public comment period. We are reviewing these permit conditions for permit and fact sheet content. We expect that in future renewals of coal fired steam electric generating facilities, NJDEP will include requirements responsive to these comments.

We have also enclosed recent guidance memos issued by the EPA Headquarters describing expectations for permitting power generating stations with FGD and/or CCR wastestreams. Finally, the EPA Region 1 has recently issued a determination of best professional judgment for calculating effluent limitations for FGD, which you may want to refer to as an example. It can be found at:

http://www.epa.gov/region1/npdes/merrimackstation/pdfs/MerrimackStationAttachE.pdf

Should you have any questions regarding this matter, please contact me at (212) 637-3866.

Sincerely yours,

for Michelle Josilo, Chief
NPDES Section

Enclosures

Comments on Mercer Generating Station (NJ0004995)

1. The EPA notes that there are two coal ash retention ponds for coal combustion residue at the facility. The overflow from the North Ash Pond flows directly into the Delaware River through Outfall 443A. The overflow from the South Ash Pond flows through Outfall 441C, combining with other wastestreams in the Discharge Canal, which flows into the Delaware River and is regulated as Outfall 441A. EPA believes that there is likely potential for discharges from such a pond, given the actual frequency of precipitation in the area. EPA notes that there are monitoring requirements for metals and mercury, but not effluent limitations specific to the overflow from the coal ash retention ponds.

   EPA notes that since there is currently no effluent limitation guideline for coal combustion residue ponds, permitting authorities must establish technology based limitations and conditions based on best professional judgment, and that permit limitations must also be protective of water quality standards. Overflow from storage of coal combustion residue can contribute metals, mercury, and solids in amounts that can cause or contribute to an exceedance of water quality standards. NJDEP should establish limitations for overflows from the coal ash retention pond, either technology based requirements, or water quality based limitations where there is reasonable potential to exceed a water quality standard from an overflow event.

2. Should the facility install a flue-gas desulphurization unit at the facility to meet requirements for air pollution control, such a wastestream may contribute additional pollutants into the wastewater discharged to the Delaware River. NJDEP should evaluate any additional waste stream for technology-based limitations that represent achievable treatment levels, as well as whether the addition would cause or contribute, or have the reasonable potential to cause or contribute to an exceedance of water quality standards. EPA also notes that treatment technologies exist for FGD waste streams, as described in the attached guidance, and that settling ponds are not considered best available technology (BAT).

3. The permit must ensure that monitoring for mercury provides a representative dataset to assess potential to cause or contribute to an exceedance of New Jersey's water quality standards in the receiving water. If limits are deemed necessary the analytical method must be sufficiently sensitive to assess compliance. EPA believes that the only analytical methods sufficiently sensitive to determine reasonable potential and assess compliance with permit limitations are EPA Methods 1631E and 254.7. EPA recommends inclusion of Method 1631E as this is the most sensitive method for mercury monitoring available under 40 CFR Part 136.

Comments on the Hudson Generating Station (NJ0000647)

1. The EPA notes that coal combustion residue is stored in a fly ash pond at the facility. The fact sheet and permit identify Outfall 61A as contributing overflow discharges from the ash pond to the Hackensack River. The fact sheet also notes that there is an ongoing process to remove ash from the storage pond. EPA notes that there are monitoring requirements for metals and mercury, but not effluent limitations specific to the overflow from the coal ash retention pond. When this permit is next renewed, should there remain a fly ash retention pond, NJDEP should consider establishing effluent limitations for discharges from the pond, if there is reasonable potential to cause or contribute to an exceedance of water quality standards.

   EPA notes that since there is currently no effluent limitation guideline for coal combustion residue ponds, permitting authorities must establish technology based limitations and conditions based on best professional judgment, and that permit limitations must also be protective of water quality standards. Overflow from storage of coal combustion residue can contribute metals, mercury, and solids in amounts that can cause or contribute to an exceedance of water quality standards. NJDEP should establish limitations for overflows from the coal ash retention pond, either technology based requirements, or water quality based limitations where there is reasonable potential to exceed a water quality standard from an overflow event.

2. Should the facility install a flue-gas desulphurization unit at the facility to meet requirements for air pollution control, such a wastestream may contribute additional pollutants into the wastewater discharged to the Delaware River. NJDEP should evaluate any additional waste stream for technology-based limitations that represent achievable treatment levels, as well as whether the addition would cause or contribute, or have the reasonable potential to cause or contribute to an exceedance of water quality standards. EPA also notes that treatment technologies exist for FGD waste streams, as described in the attached guidance, and that settling ponds are not considered best available technology (BAT).

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Comments on the Deepwater Energy Center (NJ0005363)

1. EPA notes that since there is currently no effluent limitation guideline for coal combustion residue ponds, permitting authorities must establish technology based limitations and conditions based on best professional judgment, and that permit limitations must also be protective of water quality standards. Overflow from storage of coal combustion residue can contribute metals, mercury, and solids in amounts that can cause or contribute to an exceedance of water quality standards. If fly ash is stored in a retention pond on-site, NJDEP should establish limitations for overflows from the coal ash retention pond, either technology based requirements, or water quality based limitations where there is reasonable potential to exceed a water quality standard from an overflow event.

2. Should the facility install a flue-gas desulphurization unit at the facility to meet requirements for air pollution control, such a wastestream may contribute additional pollutants into the wastewater discharged to the Delaware River. NJDEP should evaluate any additional waste stream for technology-based limitations that represent achievable treatment levels, as well as whether the addition would cause or contribute, or have the reasonable potential to cause or contribute to an exceedance of water quality standards. EPA also notes that treatment technologies exist for FGD waste streams, as described in the attached guidance, and that settling ponds are not considered best available technology (BAT).

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